Arizona's Accountability Systems: 2007 NCLB and AZ LEARNS Workbook

Arizona Department of Education
Research and Evaluation Section

1. **Circle the three components of an Adequate Yearly Progress (AYP) calculation.**

95% Tested	**Truancy Rate**
Annual Measurable Objectives	**Percentage of Highly Qualified Teachers**
School Improvement Status	**Additional Indicator(s)**

2. **List the subgroups that are evaluated for AYP.**

    1.
    2.
    3.
    4.

3. **What are Annual Measurable Objectives (AMOs)?**

4. **Below is a roster of 3rd grade students at Gila Monster Elementary:**
    a. **Did the school test 95 percent of its students for 3rd grade reading this year?**

Student Number	Name	AIMS Reading Score	Use for % Tested	Use for AMO	AIMS Math Score	Full academic year
1	Aleks	M			A	Y
2	Alphonse	A			A	Y
3	Angeles	M			A	Y
4	Anju	FFB			FFB	Y
5	Bryan	DNA			DNA	N
6	Cathy	M			M	Y
7	Charlie	E			FFB	Y
8	Chris	M			M	Y
9	Christine	E			A	Y
10	Cindy	A			A	Y
11	David	E			E	N
12	Donna	E			E	Y
13	Emily	DNA			DNA	Y
14	Gerae	M			A	Y
15	Irene	M			M	Y
16	Jackie	E			E	Y
17	Jay	M			FFB	Y
18	Jennifer	M			M	Y
19	John	M			A	Y
20	LaDonna	M			M	Y
21	Laura	M			FFB	Y
22	Linda	E			E	Y
23	Michelle	M			M	Y
24	Robert	FFB			FFB	Y
25	Roberta	A			A	Y
26	Rolanda	A			A	Y
27	Sabrina	E			E	Y
28	Sharon	M			FFB	Y
29	Sherry	M			A	Y
30	Stephanie	A			A	Y
31	Steve	A			A	Y
32	Tommie	A			A	Y
33	Tyrel	M			M	Y

b. The data for 3rd grade reading at Gila Monster for the past three years is the following:

	2003	2004	2005
Enrollment	30	32	33
Number Tested	30	31	31

Will the school fail to make AYP as a result of not testing 95 percent of 3rd Grade students in reading?

5. Using the roster in question 4:

a. Determine if Gila Monster Elementary met the AMO of 53 percent for 3rd grade math.

b. Did Gila Monster Elementary meet the AMO for 3rd grade math using a confidence interval?

6. The following table provides accountability information for the 5th grade at Gila Monster Elementary. Determine which subgroups made the AMO due to safe harbor.

	All students	White	ELL	Economically Disadvantaged
Current year not proficient	57%	44%	62%	52%
Prior year not proficient	60%	50%	70%	60%
Percent improvement				
Met 10 percent reduction?				
Current year attendance rate	94%	94%	90%	90%
Prior year attendance rate	95%	95%	89%	92%
Met AMO?				

7. Determining AMOs using growth. The following table shows how the growth measure can be calculated for a subgroup. This is a subgroup of 4th graders, and we are examining if it met the AMO for 4th grade math. The passing score for 4th grade is 448.

a. Calculate the missing growth targets.

b. Calculate the missing actual growth achieved.

c. Determine if students 6-10 met their growth targets.

d. Did this subgroup meet the AMO? The AMO for 4th grade math is 54 percent.

Student ID	Actual Score 3rd Grade	Passing Score 6th Grade	Growth Target	Actual Score 4th Grade	Actual Growth	Met Growth Target
1	440	496	19	450	10	Y
2	400	496	32	440	40	Y
3	450	496	15	440	-10	N
4	390	496	35	430		Y
5	445	496	17	440		N
6	420	496	25	440		
7	460	496		465		
8	435	496	20	454	19	
9	425	496	24	440	15	
10	415	496		445	30	

8. The following table shows information regarding attendance and graduation rates for five schools:

	Elementary school # 1	Elementary school # 2	Elementary school # 3	High school #1	High school #2
Attendance rate 2007	94	92	89	89	94
Attendance rate 2006	96	90	90	90	94
Graduation rate 2006	NA	NA	NA	70	71
Graduation rate 2005	NA	NA	NA	69	75

Which schools made AYP in their additional indicator?

9. Below is a roster of students who took the 8th grade math test:

Student Number	Name	ELLPROF	ELLYR	J-code alternative modification	Full Academic Year	Valid	Use for AYP?	Use for AZ LEARNS?
1	Aleks				Y	1		
2	Alphonse				Y	1		
3	Angeles	1	2		Y	0		
4	Anju			Y	Y	0		
5	Bryan	1	4		N	1		
6	Cathy			Y	Y	0		
7	Charlie				Y	1		
8	Chris	1	3		Y	0		
9	Christine				N	1		
10	Cindy				Y	1		

a. **Which students are included in the AMO calculation?**
b. **Which students are included in the AZ LEARNS calculation?**

10. Calculating points from AIMS - This exercise will guide you through the steps of calculating an AZ LEARNS profile for a typical school:

Step 1: Calculating status points - use the information provided below to calculate the status points for each grade and subject.

AIMS test results					
Grade	Subject	Number tested	Number pass	Percent Pass	Status points
3	Math	50	40	80%	4
3	Reading	50	25		
3	Writing	50	32		
10, 11, & 12	Math	100	20	20%	3
10, 11, & 12	Reading	100	62		
10, 11, & 12	Writing	100	35		

Status Groups							
Grade	Subject	Status Group 1	Status Group 2	Status Group 3	Status Group 4	Status Group 5	Status Group 6
3	Math	<51%	51-64%	65-78%	79-88%	89-94%	>=95%
3	Read	<46	46-59	60-73	74-84	85-92	>=93
3	Writ	<56	56-67	68-78	79-87	88-93	>=94
HS	Math	<5	5-13	14-29	30-51	52-70	>=71
HS	Read	<16	16-28	29-46	47-65	66-79	>=80
HS	Writ	<18	18-30	31-48	49-67	68-80	>=81

Step 2: Calculating school improvement points - use the information provided below to calculate the school improvement points for third grade math.

	2004	2005 & 2006	Change
Percent Pass	50%	54%	(A)
Percent FFB	10%	6%	(B)
	Total change (A) – (B)		
	School improvement points		

Growth Groups

Grade	Subject	Growth Group 1	Growth Group 2	Growth Group 3	Growth Group 4	Growth Group 5	Growth Group 6
3	Math	<-15%	-15 - -5	-6 - 1%	2 - 9%	10 - 17%	>18%
3	Read	<-20	-20 - -12	-13 - -5	-6 – 0	1 – 8	>9
3	Writ	<-13	-13 - -3	-4 – 3	4 -12	13 – 21	>22

Step 3: Find total status and improvement points. Add the status and improvement points using the 70-30 weight. Average the sums by subject and then add across subjects to determine total number of points from status and school improvement.

Subject: Math			
Grade	Status points	Improvement points	Weighted sum
3	4	5	
4	5	0	
5	4	5	
		Average	

Average points math	
Average points reading	4.4
Average points writing	4.7
Total AIMS points	

11. The table below shows how many 8th graders exceeded the standard on the AIMS for the past three years.

Year	Number tested math, reading, and writing	Number exceeding math, reading, and writing
2005	45	6
2006	50	7
2007	55	7

a. Calculate the z-score for the 8th grade. The state average and standard deviation for the 8th grade are .06 and .07.

b. The school also serves the 6th and 7th grades. The z-score for 6th grade is .95 and the z-score for 7th grade is 1.06. Is the average z-score high enough for the school to be an excelling school?